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| 10/529,502 | 03/28/2005 | Gabi Muller | 12810-00039-US | 6750 |
| 23416 | 7590 | 09/12/2007 | EXAMINER | |
| CONNOLLY BOVE LODGE & HUTZ, LLP | | | ROGERS, JAMES WILLIAM | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,502

Applicant(s)

MULLER ET AL.

Examiner

James W. Rogers, Ph.D.

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/03/2007 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically each claim recites a **polymer** that contains at least monomers A-C, however applicants claimed invention comprises more than one type of monomer, therefore applicants claimed invention is a **copolymer**. Polymer reads on any type of polymer including homopolymer and copolymers but applicants claimed invention would only read on copolymer not the broader genus polymer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hossel et al. (US 2001/0021375 A1, cited previously).

Hossel discloses cosmetic sunscreen preparations in the form of emulsions or gels comprised of at least one copolymer comprised of a) 0.01 to 99.99% of N-vinylimidazoles and b) 0.01 to 99.99% of at least one neutral or basic water soluble

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polymer which is different from a) which includes N-vinylcaprolactam and N-vinylpyrrolidone. See [0001],[0011], [0040] and [0100]. The examiner notes that b) can be a mixture of two monomers such as N-vinylcaprolactam and N-vinylpyrrolidone therefore the limitations of the B and C monomers in the copolymer of applicants claimed invention are met. The polymers of Hossel were said to stabilize the cosmetic and dermatological preparation. See [0085]. Within the broad range of weight percents of a) and b) above it is obvious that the skilled artisan could select the weight percents and weight ratios disclosed by applicants for monomers A,B and C. One with skill in the art would be motivated to optimize the molar concentration of the monomers within the copolymer of Hossel through routine experimentation to adjust the properties of the copolymer, which was said to stabilize the cosmetic preparation.

Claims 6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hossel et al. (US 2001/0021375 A1, '375 from hereon) in view of Hossel et al. (US 6,191,188 B1, cited previously, '188 form here on).

'375 is disclosed above.

'375 discloses cosmetic compositions, but the compositions are mostly directed to use on human skin and '375 is silent on the copolymers use in shampoos and hair setting compositions.

'188 is used primarily for its disclosure within that copolymers comprising N-vinylimidazole, N-vinylcaprolactam and N-vinylpyrrolidone were already well known at the time of the invention to be used in cosmetic hair compositions such as hair setting and styling compositions. See abstract, col 5 lin 11-23 and claims 1,9-10. The

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copolymer of '188 is very similar to the copolymer disclosed within '375, however the copolymers can be completely uncharged (unquaternized). Thus from the disclosure within '188 the skilled artisan could see that either charged or uncharged copolymers such as those described within '375 or '188 could be used in a cosmetic formulation intended for use on the hair.

It would have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to combine the art described in the documents above because '375 discloses all of applicants claimed invention but is silent on the use of the disclosed copolymers in shampoos and hair setting compositions while '188 showed that it was already known in the art to use copolymers such as those disclosed in '375 in hair compositions. The motivation to combine the above documents would be to form a cosmetic preparation useful in skin and hair cosmetics comprising a copolymer comprised of N-vinylimidazole, N-vinylcaprolactam and N-vinylpyrrolidone. The advantage of such a composition with the disclosed copolymers would be improved stability, formulation and sensory properties for use in both skin and hair cosmetics. See [0008] in '375 and col 1 lin 38-55 in '188. Thus, the claimed invention, taken as a whole was *prima facie* obvious over the combined teachings of the prior art.

Response to Arguments

Applicant's arguments filed 07/10/2007 have been fully considered but they are not persuasive.

Applicant asserts that the polymers of Hosel '375 are employed exclusively in quarternized form, which is said to be different from applicants claimed polymer, which comprises unquarternized VI monomer units.

The relevance of these assertions is unclear. Applicants do not claim an unquarternized copolymer instead they claim a copolymer consisting essentially of monomers A-C. There is no mention on whether these monomers are in quarternized or unquarternized form, therefore the 103(a) rejections over '375 still stand. A quarternized polymer is still a polymer and applicant's currently amended claims do not preclude quarternized polymers. The new transitional phrase "consist essentially of" does not preclude the use of quarternized (charged polymers) since there is no proviso that the polymers are uncharged. The transitional phrase "consist essentially of" only excludes materials within the composition that would materially affect the basic and novel feature of the composition.

Conclusion

No claims are allowed at this time.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

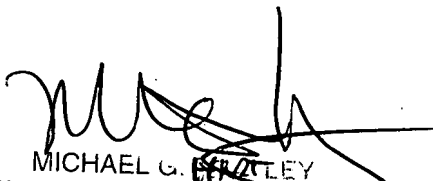
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 271-0616. The fax phone number for the organization where this application or proceeding is assigned is 572-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER